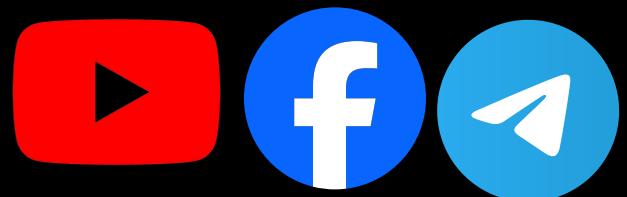




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WHEN TO EXTRACT BADLY DECAYED 6 IN CHILDREN?



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INTRODUCTION



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- Children continue to present with a developing dentition affected by one or more compromised **first permanent molars** (FPM) with an uncertain prognosis.
- This places a burden of disease on each child that can lead to sensitivity and pain, complex restorations or extractions and disruption to the functional occlusion.
- When correctly planned, interceptive extraction of the FPM can be followed by successful eruption of the **second permanent molar** (SPM) to provide a suitable replacement, and ideally **third molar** eruption (TPM) to complete the molar dentition.

» FOR THESE REASONS

THE ELECTIVE EXTRACTION OF COMPROMISED FPMs WITH AN UNCERTAIN LONG-TERM PROGNOSIS SHOULD ALWAYS BE CONSIDERED WITHIN THE CONTEXT OF THE PATIENT AND THEIR UNDERLYING OCCLUSION;

AND

FPM TREATMENT-PLANNING DECISIONS SHOULD IDEALLY BE MADE FOLLOWING INPUT FROM BOTH THE GENERAL DENTAL PRACTITIONER (GDP) OR PAEDIATRIC DENTIST AND A SPECIALIST ORTHODONTIST.



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WHAT ENCOURAGES



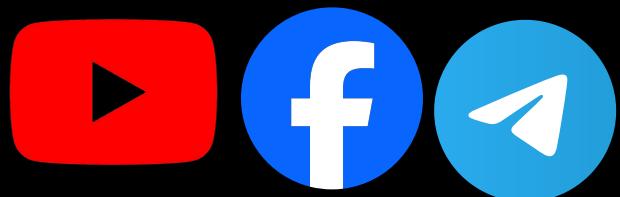
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EXTRACTION?

1. BADLY DESTRUCTED MOLAR.
2. PERIAPICAL LESION.
3. MIH CASE.
4. NEEDED FOR RELIEVE CROWDING.

IF YOU MAKE THE BEST RESTORATION IN
THE WORLD, HOW LONG WILL IT CONTINUE
WITH 10 YEARS BOY !?

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➡ RESPECT RESTORATIVE CYCLE
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AFTER PANORAMIC INSPECTION

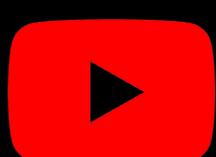
3 CONDITIONS MUST BE EXISTED

1. CRYPT OF 8 IS FORMED.
2. BIFURCATION OF 7 STARTED TO FORM.
3. INCLINATION OF 7 IS MESIALLY TIPPING.

AGE : 8-10 Y

EXAMPLES

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CASE 1

BIFURCATION OF 7 NOT FORMED

NO EXTRACTION



CASE 2

BIFURCATION OF 7 FORMED

CRYPT OF 8 IS FORMED

EXTRACTION



CASE 3

INCLINATION OF 7 ISN'T MESIALLY
TIPPING

NO EXTRACTION



CASE 4

INCLINATION OF 7 ISN'T MESIALLY
TIPPING & CRYPT OF 8 NOT EXISTED

NO EXTRACTION





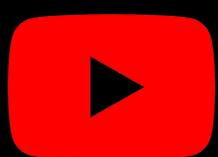
BALANCING OR COMPENSATION OR BOTH?

» A **COMPENSATING EXTRACTION** IS THE REMOVAL OF A FPM FROM THE OPPOSING QUADRANT.

» A **BALANCING EXTRACTION** IS THE REMOVAL OF A FPM FROM THE OPPOSITE SIDE OF THE SAME DENTAL ARCH.

***FPM:** FIRST PERMANENT MOLAR

***SPM:** SECOND PERMANENT MOLAR



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COMPENSATION

- extraction of a sound upper FPM has been recommended when extraction of the lower FPM is required (Holm, 1970).
- This is to avoid over-eruption of an unopposed upper FPM, which can prevent desirable mesial movement of the erupting lower SPM, thus impeding space closure and potentially inducing other occlusal interferences.
- There is little evidence to verify these claims and what evidence is available is based on retrospective cohort studies, often with very small samples (Holm, 1970; Jalevik and Moller, 2007; Mejare et al., 2005).
- **Current evidence** would suggest that the risk of upper FPM over-eruption as a consequence of lower FPM extraction is small (Jalevik and Moller, 2007; Mejare et al., 2005)

RECOMMENDATION:-

WHEN THE ENFORCED EXTRACTION OF A LOWER FPM IS REQUIRED THE COMPENSATING EXTRACTION OF A SOUND UPPER FPM **SHOULD NOT BE ROUTINELY CARRIED OUT UNLESS THERE IS A CLEAR OCCLUSAL REQUIREMENT OR LIKELIHOOD OF THE UPPER FPM BEING UNOPPOSED FOR A SIGNIFICANT PERIOD OF TIME.**

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BALANCING

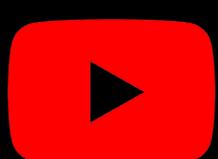
- The balancing extraction of sound FPMs has been recommended to preserve arch symmetry (Ong and Bleakley, 2010; Williams and Gowans, 2003).
- Retrospective cohort studies have suggested that unilateral FPM extraction can be associated with the development of both skeletal and dental arch asymmetries (Caglaroglu et al., 2008; Telli and Aytan, 1989).
- Evidence from similar study designs suggests that the dental centreline in either arch is unlikely to be affected (Jalevik and Moller, 2007; Mejare et al., 2005).

RECOMMENDATION:-

ROUTINE BALANCING EXTRACTION OF A SOUND FPM TO PRESERVE A DENTAL CENTRELINE **IS NOT RECOMMENDED UNLESS PART OF A COMPREHENSIVE ORTHODONTIC TREATMENT PLAN.**

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ORTHO P.O.V



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CLASS I

MINIMUM CROWDING:

- EXTRACT AT THE OPTIMAL TIME.
- NO BALANCING EXTRACTION.
- COMPENSATE UPPER ONLY (IF UNOPPOSED FOR 1 YEAR)

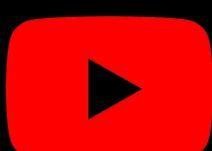
MODERATE CROWDING:

1. CROWDING AT BUCCAL SEGMENT

- EXTRACT AT OPTIMAL TIME
- IF CROWDING BILATERAL (EXTRACT BALANCING)

2. CROWDING AT INCISOR SEGMENT

- DELAY EXTRACTION TILL SECOND MOLAR ERUPTION, THEN FIXED ORTHO APPLIANCE
- OR: EXTRACT AT OPTIMAL AND EXTRACT PREMOLAR IF 8 PRESENT !!



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CLASS II



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► MINIMUM CROWDING:

- EXTRACT AT THE OPTIMAL TIME.

1. DEFICIENT MANDIBLE

- NO COMPENSATING EXTRACTION, JUST FUNCTIONAL APPLIANCE

2. CAMOUFLAGE

- EXTRACT U6S IMMEDIATELY (YOU AVOID 8 MAY BE IMPACTED) THEN YOU MAY NEED EXTRACT U4S LATER.

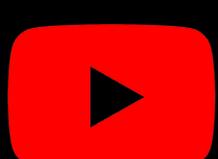
3. CLASS II 1/2 UNIT

- IF BAD PROGNOSIS, EXTRACT AT IDEAL TIME

► MODERATE CROWDING:

- EXTRACT L6S +U4S

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CLASS III



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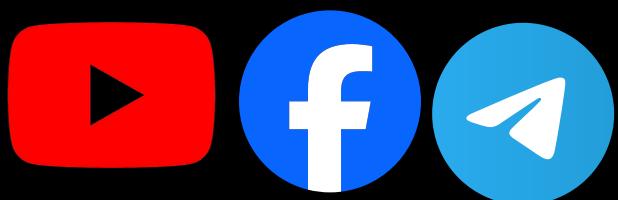
► CAMOUFLAGE

- DELAY EXTRACTION IN LOWER.

► SURGERY

- DELAY EXTRACTION IN UPPER.

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Any questions?

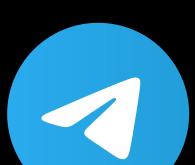
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